OCS TIME SHARING SYSTEM

ACTION COMPONENT(S):

OCS

USER COMPONENT(S):

All Agency components requiring direct access, interactive,
fast response capability from computer systems.

OBJECTIVES:

The objective of this project is to establish a computer system
which can provide many users with concurrent access to a computer
linked to remote consoles. The system permits interleaving of
many tasks by providing each user with "slices" of time on the cen-
tral processor. Generally the functions which are performed by
the user at the remote terminal consume significant (relatively)
amounts of time, while the actual processing of the data in the cen-
tral computer consumes minute amounts of time. The desired re-
sult is that the computer, in a well-balanced system, is able to serv-
ice all users so quickly that they do not experience any recognizable
waiting time, hence, the remote user gets the impression that he is
the only user of the system. A variety of facilities appropriate to
this kind of use to a computer--such as "browsing" through computer
stored files, using the terminal as a teaching device, on-line com-
puter programming, etc.--are goals within this concept.

DESCRIPTION:

OCS has developed a limited time sharing system to modulate
the impact of delays in the delivery of an IBM-provided time sharing
package. Testing of the system has been performed on an IBM 360/40
system. An initial operating capability of the time sharing system is
underway in OCS with remote terminals in the Office of Security, the
DDI area, FMSAC, and OCS. The system is considered to be experi-
mental in nature and will provide useful information on the real ex-
perience and utility of such systems.

This system is also intended to provide the basic structure with-
in which the Agency can satisfy requirements for its participation in
COINS. It is expected that during the period FY 69-73 this system
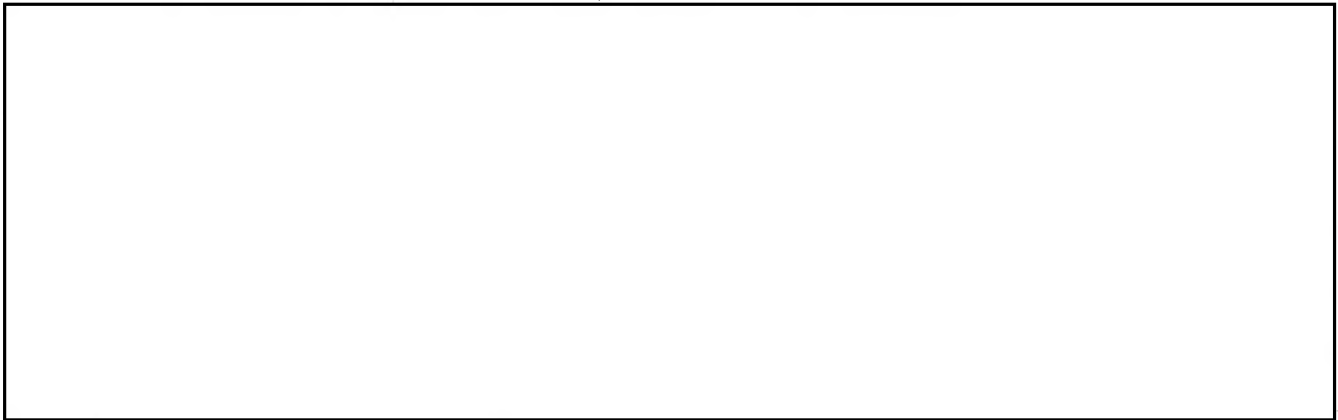
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will undergo significant changes to meet the needs of additional
user requirements. Incorporation of new hardware, the applica-
tion of new computer programming techniques, and advancements in
the telecommunications can be expected. Increased effort will be
applied to user and system evaluation, use of graphic devices, de-
velopment of software/hardware for interfacing data communication
networks with the various computer systems, the study of feasibility
of computer-to-computer networks within the Agency, and application
areas such as computer assisted instruction and conversational pro-
gramming.

CHRONOLOGY:

    Initiated: FY-66
    Operational: FY-68
    Operational Evaluation: FY-69   25X1

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